

## WILD EDIBLE PLANTS CONSUMED BY PRIMITIVE TRIBES OF KOTIA HILLS, VIZIANAGARAM DISTRICT, ANDHRA PRADESH, INDIA

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### ABSTRACT

*The present study mainly focused on the traditional wild food plants used by primitive tribes of Kotia hills, Vizianagaram District, Andhra Pradesh. A total of 75 species were documented as wild plants used for food purposes. Among the 75 species, 28 species are trees followed by 26 herbs, 11 climbers and 10 shrubs. Generally, herbaceous plant species are utilized as verdant vegetables. It has been seen that the customary information on wild food plants is on sharp decay. Except if endeavors are made to teach the more youthful generation about their significance, it is very well might be lost in not so distant future. The present study showed that there is an earnest requirement for documentation of customary information identified with the elusive social legacy concerning conventional plant employments. The usage and development of these vegetables ought to be elevated to keep up with the dietary requirements of the people in Andhra Pradesh.*

**KEYWORDS:** Wild Edibles, Primitive Tribes, Kotia Hills, Vizianagaram & Andhra Pradesh

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### INTRODUCTION

In India, tribal human beings rely on forests for their livelihood. The tribal people are very near to nature and have hereditary conventional expertise of utilizing wild plant life and plant elements viz. Tuber, stem, root, leaves, culmination and so forth. Different tribal people of India are repositories of rich sound knowledge on wild edible plant genetic resources (Khoshoo 1991). Even at some point of regular instances, wild plants provide materials of weight loss plan to the much less advanced segment of human community, frequently referred to as tribals/adivasis in India who generally inhabit hilly and different much less available tracts in both advanced and undeveloped international locations (Arora and Pandey, 1996). In India, it's far envisioned that approximately 800 species are fed on as wild edible for human consumption plants, mainly through the tribal people (Singh and Arora, 1978). Indigenous understanding of untamed wild edible for human consumption vegetation is vital for maintaining usage of these plant species (Jasmine et al, 2007). Consumption of untamed edible plant life helps rural communities particularly at some point of the duration of seasonal meals shortages. They frequently serve as alternative supply and treasured complement for nutritionally balanced weight loss plan and also a number one industrial income for each indigenous and non-indigenous human being (Prashant Kumar and Shiddamallayya 2014, Reddy et.al 2007). The role of this safety and eatable wild edible plant species in preserving human and environmental fitness has been suggested (Johns and Eyzaguirre 2006, Frison et.al 2006). In-depth studies concerning its nutritional position have additionally been highlighted in lots of surveys around the world (Tanji and 1995). The traditional knowledge of nutritional food practices has a lengthy history in relation to human nutrition. Wild food fit for human consumption

flowers had been the mainstay of human weight loss plan for centuries.

## STUDY AREA

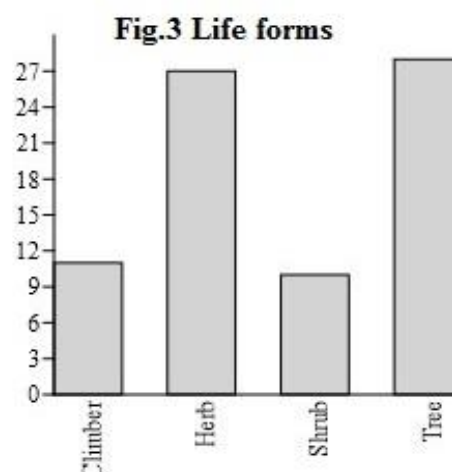
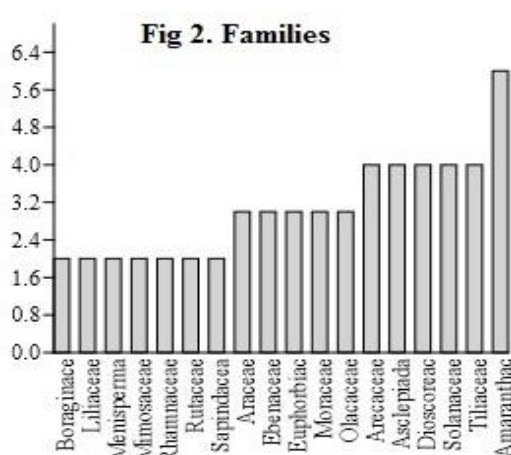
The Study area Kotia hills in Vizianagaram District are a controversial place among the governments of Andhra Pradesh and Orissa concerning the possession. The geocoordinates of Kotia Hills lies between  $18^{\circ} 26' 063''$  and  $18^{\circ} 55' 200''$  North latitudes and  $83^{\circ} 10' 426''$  and  $83^{\circ} 24' 764''$  East longitudes, the elevation of on top of the mean sea level ranges from 850m to 1615m. The Kotia Hills around on the East by Srikakulam district, on the West and South by Visakhapatnam district, on South East by Parvathipuram Revenue Division and North-West by Koraput district of Orissa state. The main primitive tribal people residing in the study area of Konda Dora, Manne Dora, Jatapu and Savara. The investigation of the wild edible study was undertaken to find out the plants utilized by primitive tribes of Kotia Hills identified twenty seven villages are notably to use numerous wild edible plant species.

## MATERIAL AND METHODOLOGY

The methodology used in this study was designed with the purpose of providing primary information on the use of plant species in local primitive tribal people through field surveys and field visits to various interior tribal areas from January 2021 to November 2021 in the Kotia hills of Vizianagaram district, Andhra Pradesh. Some personal interviews and group discussions conducted with local primitive tribal people revealed some valuable and specific information about the wild edible plants that were authenticated by crosschecking. In addition to crosschecking and recording folk names of plants through collecting voucher specimens, it is important to crosscheck information with different people and compare the results from different methods (Cunningham 2001).

## RESULT AND DISCUSSIONS

A sum of 75 wild edible plant species having a place with 56 genera and 37 families are recognized as being utilized as wild edible plants by the sources from 55 families reviewed. Out of 37 families, Amaranthaceae was observed to be the most well-known family with 6 species, Tiliaceae, Solanaceae, Dioscoreaceae, Asclepiadaceae and Arecaceae with 4 species, Olacaceae, Moraceae, Euphorbiaceae, Ebenaceae and Araceae with 3 species, Sapindaceae, Rutaceae, Rhamnaceae, Mimosaceae, Menispermaceae, Liliaceae, Boraginaceae and Aizoaceae each with 2 species and remain of the 18 families everyone had single species (Figure 2). Some wild edible Leaves are collected in various seasons, cooked and eaten with their main food. Maximum tribal people are using wild leafy vegetables as a part of their food.



Of the reported growth forms, trees and herbs make up the highest proportion of the edible species comprising 28 and 26 respectively and the remaining species climbers 11 and shrubs 10 (Fig. 3). Within the edible parts of the wild food plant, fruits (31) and leaves (27) were most widely used and the remainders were stem and tender stems, tuber and seed. The time of collection began in May and proceeded till the finish of December which were regularly collected through as vegetables, natural products, flavours, chutney, and so forth generally aerial parts like leaves, tender shoots and flowers were utilized as vegetables. The present report on the use of plants for food purposes draws support from earlier studies in different parts of India. Some eminent exploration commitments on wild edible plants from India are 151 species having a place with 86 genera and 49 families in the Khasi clans of Meghalaya to survey their agricultural significance (Jeeva, 2009). Sharma and Mishra, 2009 reported diversity, use design and native employments of 217 plant species having a place with 160 genera of 68 families in and around a cement factory in Bilaspur district of Himachal Pradesh. Bandyopadhyaya and Mukherjee (2009) detailed 125 plant species have a place with 102 genera under 54 families as wild edibles eaten by the ethnic individuals of Koch Bihar locale of West Bengal state. Kumar et al. (2013) detailed 30 eatable verdant vegetables accessible in South India alongside their pharmacological advantages. Kumar et al. (2013) announced 21 wild edible plant species having a place with 19 families with their parts utilized by nearby just as ancestral individuals inhabitation in rustic spaces of Odisha. Ramachandran and Vani (2013) revealed. A portion of the respondents even remarked that the youthful grown-ups are not taking an interest in the assortment and handling of these wild verdant vegetables and accordingly the information about a portion of the animal groups might vanish. This was likewise announced by different workers (Bonet and Valles 2002, Narayana and Kumar 2007) from somewhere else. Tubers of some plant species are cooked and eaten as curries. The instant wild edible foods are also used as a substitute for rice at the time of non-availability of food.

## CONCLUSIONS

Wild edibles are less susceptible to illnesses, can be developed effectively without the utilization of pesticides. Amusingly these plants are as yet unclear or less known to different areas of the planet. The wild consumable plant species will be promoted after phytochemical examination and Nutraceuticals considers. Documentation of wild edible from ethnobotanical methodology is significant for improving the comprehension of the Native information framework. There are numerous wild edible plants that are as yet neglected and they must be concentrated logically. We perceive the requirement for gathering, saving and recording this information as a critical and principal need for keeping up with the neighbourhood social customs as well as to work with the examination on new food sources somewhere else too.

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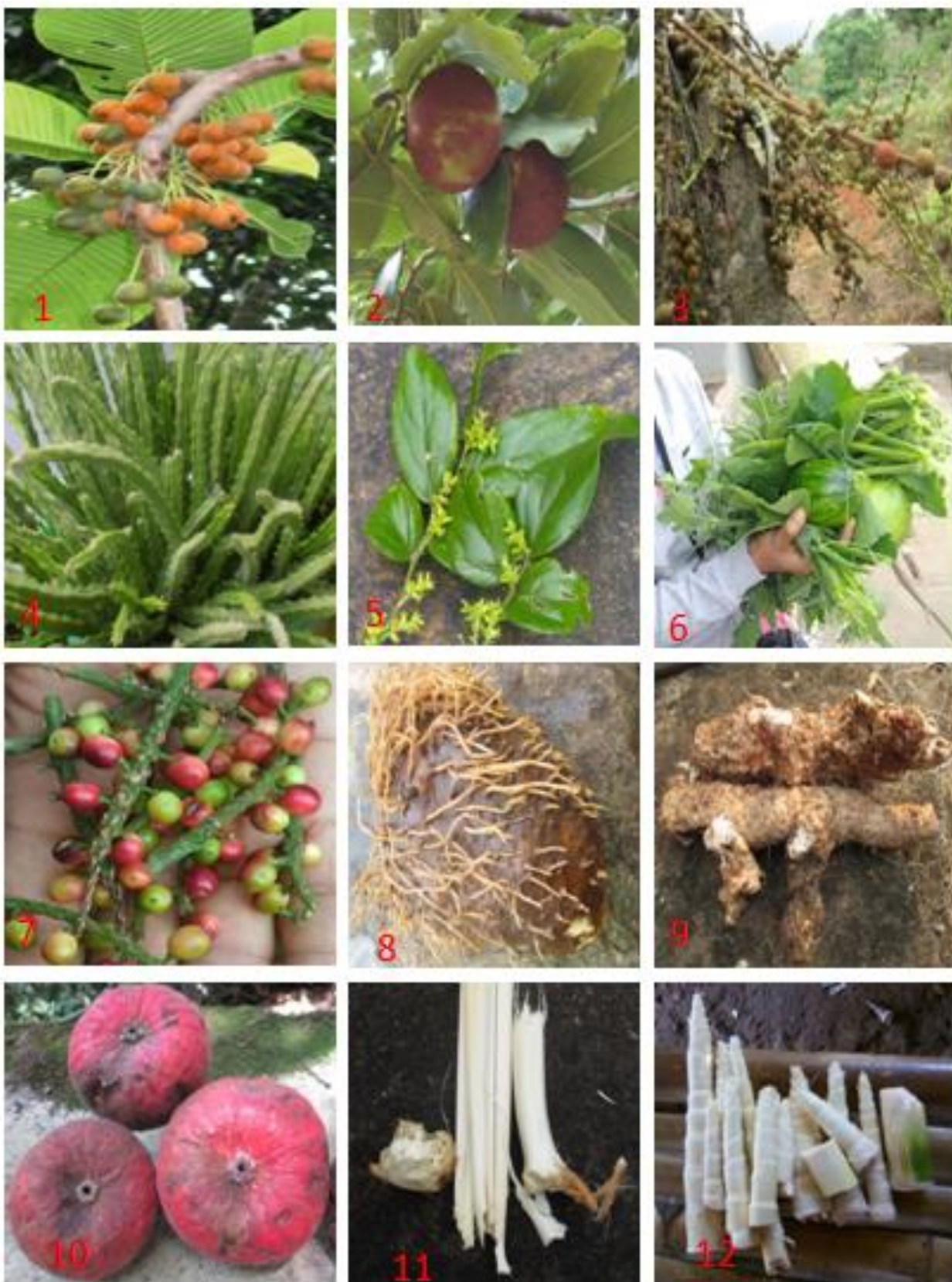


Table 1: Wild Edible Plants used by Primitive Tribes of Kotia Hills, Vizianagaram District

S. No	Scientific Name	Common Name	Habit	Parts	Mode of uses
1	<i>Allmania nodiflora</i> (L.) Wt.	Nagali kura	Herb	Leaves	Leafy vegetable
2	<i>Alocasia fornicate</i> (Roxb.) Schott.	Dumparase	Herb	Tuber	Boiled tubers are eaten
3	<i>Alternanthera paronychioides</i> St. Hil.	Ponnaganti	Herb	Leaves	Leafy vegetable
4	<i>Alternanthera sessilis</i> (L.) DC.	Ponnaganti kura	Herb	Leaves	Leafy vegetable
5	<i>Amaranthus spinosus</i> L.	Doggali	Herb	Leaves	Leafy vegetable
6	<i>Amaranthus tricolor</i> L.	Totakura	Herb	Leaves	Leafy vegetable
7	<i>Amaranthus viridis</i> L.	Chirryaku	Herb	Leaves	Leafy vegetable
8	<i>Amorphophalus paenifolius</i> (Dennst.)	Adavi kanda	Herb	Leaves	Used as a curry
9	<i>Anisochilus carnosus</i> (L.f.) Benth.	Kodipunju chettu	Herb	Leaves	Leafy vegetable
10	<i>Antidesma acidum</i> Retz.	Pulleru	Tree	Leaves	Leafy vegetable
11	<i>Aponogeton echinatus</i> Roxb	Kotigedde	Herb	Tuber	Boiled tubers are eaten
12	<i>Arisaema tortuosum</i> (Wall) Schott & Endl.	Haavumari gidda	Herb	Tuber	Corm eaten cooked.
13	<i>Asparagus racemosus</i> Willd.	Shatavari	Herb	Tuber	Tuber eaten cooked
14	<i>Bambusa arundinacea</i> (Retz.) Roxb.	Veduru	Tree	Stem	Used as curry
15	<i>Cansjera rheedii</i> Blanco	Mandikura	Shrub	Leaves	Used as curry
16	<i>Caralluma adscendens</i> R.Br.	Kundaetikommulu	Herb	Stem	As chutney.
17	<i>Caralluma attenuata</i> Wt.	Moulya	Herb	Stem	Used as a curry.
18	<i>Cardiospermum halicacabum</i> L.	Buddalalumu	Climber	Leaves	Leafy vegetable.
19	<i>Ceropegia tuberosa</i> Roxb.	Guttalu	Herb	Tuber	Boiled tubers are eaten
20	<i>Chlorophytum laxum</i> R.Br	Nelatengu	Herb	Tuber	Tuber eaten cooked
21	<i>Cocculus hirsutus</i> (L.) Diels	Dusseru	Climber	Leaves	Used as for curry.
22	<i>Colocasia esculenta</i> (L.) Schott. & Endl.	Chama	Herb	Leaves	Used as Leafy vegetable.
23	<i>Cordia dichotoma</i> Forst.f.	Iriki	Tree	Fruit	Raw fruits are eaten.
24	<i>Costus speciosus</i> (Koen.) Sm.	Beskha	Herb	Tuber	Used for chutney.
25	<i>Cucurbita maxima</i> Duchesne	Gummadi	Climber	Leaves	Used as Leaf vegetable
26	<i>Curculigo orchoides</i> Gaertner	Nela tengu	Herb	Root	Roots made into Drink
27	<i>Decalepis hamiltonii</i> Wight & Arn.	Makali beru	Climber	Root	Roots made into pickles
28	<i>Dioscorea bulbifera</i> L.	Nookala gadda	Climber	Tuber	Boil tubers are eaten
29	<i>Dioscorea oppositifolia</i> L.	Gentika dumpa	Climber	Tuber	Boil tubers are eaten
30	<i>Dioscorea pentaphylla</i> L.	Yelleru gadda	Climber	Tuber	Eaten Boil tubers
31	<i>Dioscorea tomentosa</i> Spreng.	Adavi kiska	Climber	Tuber	Eaten Boil tubers
32	<i>Diospyros chloroxylon</i> Roxb.	Illintha	Tree	Fruit	Raw fruits are edible.
33	<i>Diospyros melanoxylon</i> Roxb.	Tuniki	Tree	Fruit	Raw fruits are edible.
34	<i>Diospyros perigrina</i> (Gaertn.) Guerke	Adavi sapota	Tree	Fruit	Raw fruits are edible.
35	<i>Ehretia canarensis</i> (Cl.) Gamble	Iriki	Tree	Fruit	Raw fruits are edible.
36	<i>Ehretia laevis</i> Roxb.	Pisini	Tree	Fruit	Raw fruits are edible.
37	<i>Ficus auriculata</i> Lour.	Bodda	Tree	Fruit	Raw fruits are eaten.
38	<i>Ficus palmata</i> Forssk.	Chinabodda	Tree	Fruit	Raw fruits are eaten.
39	<i>Ficus racemosa</i> L.	Bodda	Tree	Fruit	Fruits are eaten.
40	<i>Flacourtia indica</i> (Burm. f.) Merr.	Chirumanu	Tree	Fruit	Fruits are eaten.
41	<i>Grewia flavescens</i> Juss.	Jaana	Shrub	Fruit	Fruits are eaten.
42	<i>Grewia hirsuta</i> Vahl	Juvilika	Tree	Fruit	Fruits are eaten.
43	<i>Grewia tiliaefolia</i> Vahl	Tada	Tree	Fruit	Fruits are eaten.
44	<i>Grewia villosa</i> Willd.	Pipali	Shrub	Fruit	Fruits are eaten.
45	<i>Guazuma ulmifolia</i> Lam.	Kanika chettu	Tree	Fruit	Fruits are eaten.
46	<i>Moringa oleifera</i> Gaertn.	Munaga	Tree	Leaves	Leafy vegetable
47	<i>Mucuna pruriens</i> (L.) DC.	Pativratha	Climber	Fruit	Unripe fruits roasted
48	<i>Murraya koenigii</i> (L.) Spreng.	Karivepa	Shrub	Leaves	Used in curry.
49	<i>Nelumbo nucifera</i> Gaertn.	Taamara	Herb	Leaves	Used in curry.
50	<i>Neptunia oleracea</i> Lour.	Attipatti	Herb	Leaves	Used in curry.
51	<i>Oxal scandens</i> Roxb.	Turkatoppi	Shrub	Stem	Used in curry.

52	<i>Oxalis corniculata</i> L.	Pilliadugu	Herb	Leaves	Leaves are used as curry
53	<i>Phoenix acaulis</i> L.	Adavi eetha	Shrub	Fruit	Ripe fruits are edible.
54	<i>Phoenix loureirii</i> Kunth	Chitteetha	Shrub	Fruit	Ripe fruits are edible.
55	<i>Phoenix sylvestris</i> (L.) Roxb.	Eatha	Tree	Fruit	Ripe fruits are edible.
56	<i>Phyllanthus emblica</i> L.	Usiri	Tree	Fruit	Preparation of pickle.
57	<i>Physalis angulata</i> L.	Buddalalumu	Herb	Leaves	Leafy vegetable.
58	<i>Physalis minima</i> L.	Neyibuddaku	Herb	Leaves	Leafy vegetable.
59	<i>Pithacellobium dulce</i> (Roxb.) Benth.	Seema chintha	Tree	Leaves	Used as a curry.
60	<i>Salacia chinensis</i> L.	Allitiga	Climber	Fruit	Fruits are eaten raw.
61	<i>Scheichera oleosa</i> (Lour.) Oken	Pusku	Tree	Fruit	Fruits are eaten raw.
62	<i>Schrebera swietenoides</i> Roxb.	Mokkam	Tree	Fruit	Fruits are eaten raw.
63	<i>Scutia myrtina</i> (Burm.f.) Kurz	Kondapariki	Tree	Fruit	Fruits are eaten raw.
64	<i>Securinega leucopyrus</i> (Willd.) Muell.-Arg.	Tellapulcheru	Tree	Fruit	Fruits are eaten raw.
65	<i>Semecarpus anacardium</i> L.f.	Nalla jeedi	Tree	Fruit	Fruits are eaten raw.
66	<i>Solanum nigrum</i> L.	Kamanchi	Herb	Fruit	Fruits are eaten raw.
67	<i>Solanum virginianum</i> L.	Mulaka	Shrub	Fruit	Fruits are eaten raw.
68	<i>Strychnos potatorum</i> L.f.	Iriya	Tree	Fruit	Fruits are eaten raw.
69	<i>Tinospora cordifolia</i> (Willd.) Hook.f.	Bael tiga	Climber	Leaves	Used as a curry.
70	<i>Toddalia asiatica</i> (L.) Lam.	Mrapagandra	Shrub	Leaves	Used as a curry.
71	<i>Trianthema decandra</i> L.	Tella galijeru	Herb	Leaves	Used as a curry.
72	<i>Trianthema portulacastrum</i> L.	Galijeru	Climber	Leaves	Leafy vegetable.
73	<i>Tribulus terrestris</i> L.	Palleru	Herb	Leaves	Leafy vegetable.
74	<i>Ximenia americana</i> L.	Nakkera	Tree	Fruit	Pulp taken orally.
75	<i>Ziziphus mauritiana</i> Lam.	Raegu	Tree	Fruit	Ripe fruits are edible.

